

ITEM:

11

SUBJECT:

Amendments to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins for the Control of Factors Contributing to the Dissolved Oxygen Impairment in the Stockton Deep Water Ship Channel

BOARD ACTION

Consideration of a Resolution to Adopt a Proposed Basin Plan Amendment

BACKGROUND

The proposed Basin Plan Amendment is based upon the approach presented at the 7 and 8 July 2004 Regional Board public hearing on the same topic, with modifications made in response to public and Regional Board comments received before, during, and after that meeting. The proposed amendment and the *Control Program for Factors Contributing to the Dissolved Oxygen Impairment in the Stockton Deep Water Ship Channel (DWSC)* contained therein have the following elements:

- Total Maximum Daily Load (TMDL), which includes apportioning of responsibility to the three causative factors and allocations of oxygen demanding substances and their precursors
- Conditional prohibition of discharge
- Requirements for completion of scientific studies needed to identify and quantify the impact of sources of oxygen demanding substances and their precursors
- Recommendations to agencies responsible for DWSC geometry and reduced DWSC flow to address the impact of existing and future projects on the dissolved oxygen impairment
- Estimates of costs to comply with the control program

The preface to the 13 December 2004 Draft Final Staff Report describes changes made since the 24 May 2004 Draft. This preface, plus the first two sections of the staff report, including the proposed Basin Plan language, are in attachment A. The full staff report and appendices are available on our web site at:

http://www.waterboards.ca.gov/centralvalley/programs/tmdl/sjr_do/index.html

Implementation of the TMDL is phased to allow time for: i) control measures to be implemented to address the impacts of DWSC geometry and reduced DWSC flow, and ii) studies to be conducted to better understand the sources and linkages of oxygen demanding substances and their precursors to the dissolved oxygen impairment. This Basin Plan Amendment includes a conditional prohibition of discharge for oxygen demanding substances and their precursors, effective December 2011, to address any remaining impairment. Based on the outcome of control measures and studies, however, the Regional Board will reconsider the terms of this prohibition and control program by December of 2009.

ISSUES

Following is a summary of significant changes from the 24 May 2004 Draft Final Staff Report that were incorporated into the 13 December 2004 Draft Final Staff Report:

- Three late revisions to the Basin Plan language presented at the 7 and 8 July 2004 meeting were incorporated into the current version of the Basin Plan language. These revisions include clarifications of credit for implemented control measures, resolution of conflicting allocations, and initial waste load allocations.
- The way in which excess net oxygen demand is apportioned to the three main contributing factors to the impairment has been modified. Those collectively responsible for loads of oxygen demanding substances, DWSC geometry, and reduced DWSC flow are each jointly and 100% responsible for reducing the excess net oxygen demand exerted in the DWSC (including the margin of safety).
- The concept of Loading Capacity (LC), as defined in previous versions of this report and the Basin Plan Amendment language, has been eliminated. Waste load and load allocations will be based entirely on excess net oxygen demand (ENOD). Also, the margin of safety is now based on ENOD and not LC.
- Modifications were made to the margin of safety and the manner in which the TMDL addresses uncertainty in DWSC flow measurements.
- Various baseline and compliance dates in the proposed Basin Plan language have been modified.

Based on prior work performed by the Dissolved Oxygen TMDL Steering Committee, and in response to the ongoing development of this TMDL and control program, progress has been made by a number of responsible parties on research and modeling studies to identify sources of oxygen demanding substances in the watershed and their linkage to the impairment. Work has been commenced on deployment of an aeration demonstration project in the DWSC. Regional Board staff believes that the Basin Plan Amendment, adopted as proposed, will provide ongoing regulatory incentive to ensure continued progress in understanding and solving the long-standing dissolved oxygen impairment in the DWSC.

The draft resolution to adopt the proposed Basin Plan Amendment is included in attachment B.

Mgmt. Review _____
Legal Review _____

27 January 2005, Central Valley Regional Water Quality Control Board Regular Meeting
11020 Sun Center Drive #200, Rancho Cordova, CA 95670